

IN THE CLAIMS
(Appln. No.10/631,118-Amendment C)

Please amend the claims, as follows:

1. (Previously presented) In a beverage brewer having a source of hot water, a brew basket for holding beverage ingredient to be brewed, a controllable valve system for delivering hot water from the source of hot water to the brew basket, the improvement being a control system, comprising:

an operator control panel with a plurality of hidden function selection switches respectively associated with a plurality of different operator selectable brewer functions;

means inaccessible by an operator for preselecting different modes of operation; and

a controller with

means for selectively revealing only preselected ones of the hidden function switches to an operator in accordance with the different preselected modes of operation, and

means for controlling the controllable valve system to perform one of the selectable brewer functions directly in response to actuation of the associated function selection switch that has been revealed.

2. (Previously presented) The beverage brewer of claim 1 in which

some of the plurality of different operator selectable brewer functions are the functions of respectively starting different brew cycles for making different quantities of beverage, and

the different preselected modes of operation are respectively associated with making the different quantities of beverage.

3. (Previously presented) The beverage brewer of claim 2 in which the different quantities of beverage associated with the different brew cycles include relatively small, medium and large batch sizes.

4. (Previously presented) The beverage brewer of claim 3 in which the modes preselecting means includes means for programming the controller to operate in at least one of the different modes of operation.

5. (Previously presented) The beverage brewer of claim 1 in which the control panel has other hidden switches associated with other functions, and the controller has means for selectively revealing the other hidden switches regardless of the different preselected modes of operation.

6. (Previously presented) The beverage brewer of claim 5 in which the other functions include at least one of a (a) full brewer power-on function in which full power is applied to all brewer elements requiring power, (b) a stop brew cycle function in which the controllable valve system is stopped from delivering hot water to the brew basket and (c) a water dispense function in which hot water is dispensed from a hot water faucet apart from the brew basket.

7. (Cancelled)

8. (Original) The beverage brewer of claim 5 in which the means for preselecting includes means responsive to actuation of at least one of the other function switches to program the controller.

9. (Previously presented) The beverage brewer of claim 5 in which the operator control panel has a message display for displaying information inaccessible to the operator related to making preselections of the different modes of operation.

10. (Original) The beverage brewer of claim 9 in which the message display is a hidden message display, and the controller has means for selectively revealing the message display when the preselections related information is needed for making preselections.

11. (Original) The beverage brewer of claim 1 in which
the control panel includes a hidden message display, and
the controller includes means for selectively revealing at least a portion of the
hidden message display.

12. (Original) The beverage brewer of claim 11 in which
the control panel includes another brewer function switch that is revealed
regardless of the operating mode for programming the operation of the brewer, and
the controller includes means for revealing the message display only when there is
a message to be displayed.

13. (Original) The beverage brewer of claim 12 in which the means for enabling the
message display to be revealed includes another hidden function switch that is revealable
regardless of the different modes that have been preselected.

14. (Previously presented) The beverage brewer of claim 1 in which
the operator control panel includes at least another hidden function selection
switch associated with at least another brewer function that is independent of the different
modes of operation, and
the controller includes means for selectively revealing the at least another hidden
function selection switch in response to a change in operating conditions of the brewer.

15. (Previously presented) The beverage brewer of claim 14 in which
the other hidden function selection switch is associated with an emergency stop
brew cycle function in which the controllable valve system is prevented from delivering
hot water the brew basket, and
said controller selectively revealing means reveals the emergency stop brew
function only when the brewer is in a brew cycle.

16. (Original) The beverage brewer of claim 14 in which

the another brewer function switch is associated with a hot water dispense function in which hot water is dispensed from a dispense nozzle, and
said controller selectively revealing means reveals the hot water dispense function only when the brewer is not operating in a brew cycle.

17. (Previously presented) The beverage brewer of claim 14 in which
the other brewer function switch is associated with a full power on function in which power is applied to all of the brewer elements requiring power in addition to continuing to provide power to a hot water electrical heating element, and
said controller selectively revealing means reveals the full power on switch only when the full power is off.

18. (Original) The beverage brewer of claim 1 in which
the plurality of function switches are associated with a plurality of start brew functions for making different quantities of beverage, and
the controller includes means for revealing only the preselected one of the hidden function switches when the brewer is not already in a brew cycle.

19. (Previously presented) The beverage brewer of claim 1 in which the plurality of hidden function switches are respectively associated with starting of a plurality of different brew cycles associated with a plurality of different quantities of beverage to be brewed and the controller includes means for selectively revealing only the preselected ones of the hidden function switches when a brew cycle is not already in progress.

20. (Original) The beverage brewer of claim 1 including
a partially translucent panel through which the hidden function switches cannot be seen under ordinary ambient light conditions behind which the hidden function switches are located, and in which
the selectively revealing means includes
a plurality of lights each associated with at least one of each of the hidden function switches, and

means for selectively energizing the lights associated with the hidden function switches selected to be revealed to light portions of the partially translucent panel adjacent the selected function switches, said light being visible through the translucent panel to indicate the location of the selected function switch.

21. (Original) The beverage brewer of claim 20 in which the function selection switches are push button switches and the partially translucent panel is sufficiently flexible to enable actuating the push button brewer function switches by pushing against the panel opposite the switches to press the panel against the push button switches.

22. (Previously presented) The beverage brewer of claim 21 in which the push button switches have means for carrying the associated light that is energized by the revealing means to reveal the location of the push button switch.

23. (Previously presented) The beverage brewer of claim of claim 20 in which each of the plurality of lights is associated with only one of the hidden function selection switches.

24. (Original) The beverage brewer of claim 20 in which the plurality of lights is a plurality of light emitting diodes.

25. (Original) The beverage brewer of claim 24 in which the plurality of lights is a plurality of incandescent lights bulbs.

26. (Cancelled) In aA beverage brewer, having a source of hot water, a brew basket for holding beverage ingredient to be brewed, a controllable valve system for delivering hot water from the source of hot water to the brew basket, the improvement being a control system, comprising:

an operator control panel with a plurality of hidden function selection switches respectively associated with a plurality of different operator selectable brewer functions;
means inaccessible by an operator for preselecting at least one of a plurality of different phases of operation; and

a controller with means for selectively revealing only selected ones of the hidden function selection switches to an operator in accordance with the at least one of the plurality of different phases of operation that has been preselected; and

means for controlling the controllable valve system to perform one of the selectable brewer functions directly in response to actuation of the associated function selection switch that has been revealed .

27. (Canceled) The beverage brewer of claim 26 in which

some of the plurality of different operator selectable brewer functions include functions of starting brew cycles for making different quantities of beverage, and

the controller selectively reveals start brew cycle function selection switches only when the operating status is other than a brewing-in-process status.

28. (Currently amended) The beverage brewer of claim 26~~1~~ in which the brewer functions include at least one of (a) a brewer power on function, (b) a stop brew cycle function, and (c) a water dispense function and (d) a start brew function.

29. (Currently amended) The beverage brewer of claim 26~~1~~ in which

the controller includes means for programming the controller to operate in different modes of operation, and

at least one of the function selection switches that is capable of actuating a brewer function is also capable of being used for inputting programming information when the controller is in a programming mode.

30. (Original) The beverage brewer of claim 29 in which the operator control panel has a message display for displaying information needed for programming the controller.

31. (Original) The beverage brewer of claim 30 in which

the message display is a hidden message display, and

the controller has means for selectively revealing the message display when needed for programming.

32. (Cancelled) The beverage brewer of claim 26 in which
the control panel includes a hidden message display, and
the controller includes means for selectively revealing at least a portion of the
hidden message display.

33. (Original) The beverage brewer of claim 329 in which the controller includes means
for revealing the message display only when there is a message to be displayed.

34. (Cancelled) The beverage brewer of claim 26 in which
one of the brewer function switches an emergency stop brew switch associated
with an emergency stop brew cycle function, and
said controller selectively revealing means reveals the emergency stop brew
switch only when the brewer is in a brew cycle.

35. (Cancelled) The beverage brewer of claim 26 in which
one of the brewer function switches is a hot water dispense switch associated with a
hot water dispense function in which hot water is dispensed from a dispense nozzle, and
said controller selectively revealing means reveals the hot water dispense function
switch only when the brewer is not operating in a brew cycle.

36. (Cancelled) The beverage brewer of claim 26 in which
another brewer function switch is a full power on switch associated with a full
power-on function, and
said controller selectively revealing means reveals the full power on switch only
when the full power is off.

37. (Currently amended) The beverage brewer of claim 26, in which
at least one of the plurality of function switches is a start brew switch associated
with a start-brew function for making an associated quantity of beverage, and

the controller includes means for revealing the start brew switch only when the brewer is not already in a brew cycle.

38. (Previously presented) The beverage brewer of claim 37 in which
at least another one of the plurality of function switches is another start brew switch associated with a start brew function for making another associated quantity of beverage different from the one quantity of beverage, and
the controller includes means for revealing both the one and the other hidden start brew switch when the brewer is not already in a brew cycle.

39. (Previously presented) The beverage brewer of claim 38 in which the controller includes

means for preselecting different modes of operation in which less than all of the one and the other brew start switches are enabled to start a brew cycle, and

means for selectively disabling the revealing means from revealing any of the one and the other hidden brew start switches that is not enabled.

40. (Cancelled) The beverage brewer of claim 26 in which

the hidden function selection switches are hidden behind a partially translucent panel through which the hidden function selection switches cannot be seen under ordinary ambient light conditions, and

the selectively revealing means includes means for selectively lighting portions of the panel adjacent the hidden function selection switches selected to be revealed, light from said selectively lighting means being visible through the translucent panel to indicate the location of the selected function selection switch.

41. (Cancelled) The beverage brewer of claim 40 in which

the function selection switches are push button switches, and
the partially translucent panel is sufficiently flexible to enable actuating the push button switches by pushing against the panel opposite the push button switches to press the panel against the push button switches.

42. (Cancelled) The beverage brewer of claim 41 in which the pushbutton switches have means for carrying a source of light that is energized by the revealing means to reveal the location of the push button switch.

43. (Cancelled) The beverage brewer of claim 41 in which the selectively lighting means includes a separate light source for each of the push button switches.

44. (Cancelled) The beverage brewer of claim 43 in which each light source includes at least one light emitting diodes.

45. (Cancelled) The beverage brewer of claim 43 in which each light source is at least one incandescent light source.

47. -90. (cancelled)

91. (Currently amended) In a food processing apparatus including means for performing a plurality of different processes, means for holding at least one food ingredient, means for moving the at least one food ingredient from the holding means to a processing location and means for performing at least one physical process on the at least one food ingredient, the improvement being a directive manual control system, comprising:

a plurality of hidden function selection switches associated with a plurality of different operator selectable food processing functions;

a housing with a partially translucent, protective, operator control panel having an interior side covering the plurality of switches and through which the hidden function switches cannot be seen under ordinary ambient light conditions, and an exterior side for manual engagement by an operator;

a plurality of lights each associated with at least one of each of the hidden function switches and located at the interior side of the panel;

a controller with means inaccessible by an operator for selecting ones of the hidden function switches to be revealed to an operator in accordance with a computer program stored in the controller; and

means for energizing only the lights associated with the hidden function selection switches selected to be revealed to illuminate portions of the interior side partially translucent panel adjacent the selected function switches, said illumination of the interior side of the panel being visible through the translucent panel to indicate at the exterior of the panel the location of the selected one of the function switches; and

means for controlling at least one of the food ingredient moving means and the food processing means and the process performing means to perform a food processing function in response to actuation of an associated function selection switch that has been revealed.

91. (canceled)

92. (Previously presented) The food processing apparatus of claim 122 in which the controller when in the preselected different modes of operation relatively temporarily disables different ones of the function selection switches that are not relatively permanently disabled in response to changing conditions of the apparatus.

93. (Previously presented) The food processing apparatus of claim 122 in which the different modes of operation include different modes of operation of one of (a) a coffee brewer, (b) a hot tea brewer, (c) a fresh iced tea brewer, (d) a hot water heater and dispenser and (e) a food grinder.

94.-96. (canceled)

97. (Currently amended) In a food processing apparatus including for performing a plurality of processesmeans for holding at least one food ingredient, means for moving the at least one food ingredient from the holding means to a processing location and

means for performing at least one physical process on athc at least one food ingredient,
the improvement being a directive manual control system, comprising:

a plurality of hidden function selection switches associated with a plurality of different operator selectable food processing functions;

a housing with a partially translucent, protective, operator control panel having an interior side covering the plurality of switches and through which the hidden function switches cannot be seen under ordinary ambient light conditions, and an exterior side for manual engagement by an operator with a tactile code associated with at least one of the plurality of switches;

a plurality of lights each associated with at least one of each of the hidden function selection switches and located at the interior side of the panel;

a controller with means inaccessible by an operator for selecting ones of the hidden function selection switches to be revealed to an operator in accordance with a computer program stored in the controller; and

means for energizing only the lights associated with the hidden function selection switches selected to be revealed to illuminate portions of the interior side partially translucent panel adjacent the selected function switches, said illumination of the interior side of the panel being visible through the translucent panel to indicate at the exterior of the panel the location of the selected one of the function switches; and

means for controlling at least one of the food ingredient moving means and the food processing means and the process performing means to perform a food processing function in response to actuation of an associated function selection switch that has been revealed.

98. (original)The food processing apparatus of claim 97 in which the tactile code is formed by embossments formed on the exterior side of the exterior side of the surface of the operator control panel.

99. (original)The food processing apparatus of claim 97 in which the tactile code is a Braille code.

100.(Cancelled)

101. (Previously presented) In a food processing apparatus for performing a plurality of processes on a food ingredient including a heating element and a plurality of valves, the improvement being a manual control system, comprising:

a plurality of hidden function selection switches associated with a plurality of different operator selectable food processing functions including functions associated with the plurality of valves;

a housing with a partially translucent, protective, operator control panel having an interior side covering the plurality of switches and through which the hidden function switches cannot be seen under ordinary ambient light conditions, and an exterior side for manual engagement by an operator;

a plurality of lights each associated with at least one of each of the hidden function switches and located at the interior side of the panel;

a controller with means for selecting ones of the hidden function switches to be revealed to an operator in accordance with a computer program stored in the controller; and

means for energizing only the lights associated with the hidden function selection switches selected to be revealed to illuminate portions of the interior side partially translucent panel adjacent the selected function switches, said illumination of the interior side of the panel being visible through the translucent panel to indicate at the exterior of the panel the location of the selected one of the function switches; and

means associated with the controller for providing a demonstration mode in which the heating elements and all of the plurality of valves are disabled from operating in response to actuation of the hidden function switches but in which the controller selectively reveals the hidden function selection switches and operates otherwise substantially the same in response to actuation of the function selection switches and the computer program stored in the controller.

102. (Previously presented) In a food processing apparatus for performing a plurality of processes on a food ingredient including a heating element and a plurality of valves, the improvement being a manual control system, comprising:

means for selectively operating the apparatus in accordance with a normal operations mode in which the heating element and the plurality of valves may be operated in accordance with a normal operations program; and

means for selectively operating the apparatus in accordance with one of

a program mode in which various programmable parameters that dictate operation in the normal operations program may be selectively excluded and other parameters may be established,

a self-diagnostic mode in which faults in the apparatus are detected , and

a demonstration mode substantially the same as the normal operations mode except for selected functions.

103. (Original) The food processing apparatus of claim 102 in which the apparatus includes an electronic message display that is operated in accordance with one of the program mode, the self-diagnostic mode and the demonstration mode.

104. (Previously presented) In a food processing apparatus for performing a plurality of processes on a food ingredient including a heating element and a plurality of valves, the improvement being a manual control system, comprising:

means for selectively operating the apparatus in accordance with a normal operations mode in which the heating element and the plurality of valves may be operated in accordance with a normal operations program; and

means for selectively operating the apparatus in accordance with one of

a program mode in which various programmable parameters that dictate operation in the normal operations program may be selectively excluded and other parameters may be established,

a self-diagnostic mode in which faults in the apparatus are detected , and

a demonstration mode substantially the same as the normal operations mode except for selected functions and further including

a plurality of hidden switches that are selectively revealed by back-lights when in the normal operations program, and

means for disabling selective functions normally performed during normal operations of the apparatus when in the demonstration mode of operation while continuing to enable substantially all other normal operations of the apparatus including selective revealing of the hidden switches in response of the back-lights.

105. (Original) The food processing apparatus of claim 102 in which the apparatus includes an electronic display that is operated in accordance with the self-diagnostic program to display error codes associated with different fault conditions that are detectable by the self-diagnostic program.

106. (Previously presented) The beverage brewer of claim 1 in which the hidden function switches are discrete switches that are spaced from one another at fixed locations.

107. (Cancelled) The beverage brewer of claim 26 in which the hidden function switches are discrete switches that are spaced from one another at fixed locations.

108. (Previously presented) The beverage brewer of claim 91 in which the hidden function switches are discrete switches that are spaced from one another at fixed locations.

109. (Previously presented) The beverage brewer of claim 97 in which the hidden function switches are discrete switches that are spaced from one another at fixed locations.

110. (Previously presented) The beverage brewer of claim 1091 in which the hidden function switches are discrete switches that are spaced from one another at fixed locations.

111. (Previously presented) The beverage brewer of claim 101 in which the hidden function switches are discrete switches that are spaced from one another at fixed locations.

112. (Previously presented) The beverage brewer of claim 1 in which the hidden switches are associated with only a single function.

113. (Previously presented) The beverage brewer of claim 26 in which the hidden switches are associated with only a single function.

114. (Previously presented) The beverage brewer of claim 91 in which the hidden switches are associated with only a single function.

115. (Previously presented) The beverage brewer of claim 97 in which the hidden switches are associated with only a single function.

116. (Currently amended) The beverage brewer of claim 1091 in which the hidden switches are associated with only a single function.

117. (Previously presented) The beverage brewer of claim 101 in which the hidden switches are associated with only a single function.

118. (Previously presented) The beverage brewer of claim 11 in which the message display is distinct and separated from the function selection switches.

119. (Previously presented) The beverage brewer of claim 11 in which the message display is an LED display.

120. (Currently amended) The beverage brewer of claim 323 in which the message display is distinct and separated from the function selection switches.

121. (Currently amended) The beverage brewer of claim 323 in which the message display is an LED display.

122. (Currently amended) The food processing apparatus of claim 91 including
means associated with the controller for preselecting different modes of operation
in which different ones of the function switches are not to be used, and
means for relatively permanently disabling the different ones of the function
switches not to be used while the associated mode of operation remains preselected.

123. (Previously presented) In a food processing apparatus for performing a plurality of processes on a food ingredient including a heating element and a plurality of valves, the improvement being a manual control system, comprising:

means for selectively operating the apparatus in accordance with a normal operations mode in which the heating element and the plurality of valves may be operated in accordance with a normal operations program; and
means for selectively operating the apparatus in accordance with one of
a program mode in which various programmable parameters that dictate operation in the normal operations program may be selectively excluded and other parameters may be established,
a self-diagnostic mode in which faults in the apparatus are detected, and
a demonstration mode substantially the same as the normal operations mode except for selected functions;
an electronic message display that is operated in accordance with one of the program mode, the self-diagnostic mode and the demonstration mode; and
means for selectively hiding the electronic message display during operations in accordance with the normal operations programs and selectively revealing the electronic

message display when the apparatus is operated in accordance with the at least one of the program mode, the self-diagnostic mode and the demonstration mode.

124. (Previously presented) The food processing apparatus of claim 103 in which the electronic display is selectively revealed during all of the program mode, the self-diagnostic mode and the demonstration mode.

* * * * *